

Print selected from Online session Page 1 10/06/2003

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(FILE 'HOME' ENTERED AT 15:48:55 ON 06 OCT 2003)

FILE 'CAPLUS' ENTERED AT 15:49:05 ON 06 OCT 2003

| | | |
|----|------|--|
| L1 | 11 S | CATALYST (P) GRAPHITE (P) (YTTRIUM OR LANTHANUM) |
| L2 | 0 S | CATYLIST (P) GRAPHITE (P) SCANDIUM |
| L3 | 1 S | CATALYST (P) GRAPHITE (P) SCANDIUM |

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:606490 CAPLUS

DOCUMENT NUMBER: 125:255050

TITLE: Metallic oxide catalyzed growth of carbon nanotubes

AUTHOR(S): Ohkohchi, M.; Zhao, X.; Wang, M.; Ando, Y.

CORPORATE SOURCE: Dep. of Physics, Meijo Univ., Nagoya, 468, Japan

SOURCE: Fullerene Science and Technology (1996), 4(5), 977-988

CODEN: FTECEG; ISSN: 1064-122X

PUBLISHER: Dekker

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Carbon nanotubes were created in the cathode deposit by DC arc-discharge evapn. of graphite rods contg. Y2O3, La2O3 or Sc2O3. The oxides have catalytic action in promoting growth of the nanotubes. The most remarkable catalytic effect was obsd. for the case of metallic oxide addn. 2-8 wt% and arc current 165-196 A.

IT Carbon fibers, preparation

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(nanotubes; catalyzed growth of carbon nanotubes in the cathode deposit of arc-discharge evapn. from graphite rods contg. Y2O3, La2O3 or Sc2O3)

IT 1312-81-8, Lanthanum oxide (La2O3) 1314-36-9, Yttrium oxide (Y2O3), uses 12060-08-1, **Scandium** oxide (Sc2O3)

RL: CAT (Catalyst use); USES (Uses)

(**catalyst**; catalyzed growth of carbon nanotubes in the cathode deposit of arc-discharge evapn. from **graphite** rods contg. Y2O3, La2O3 or Sc2O3)

IT 7440-44-0P, Carbon, preparation

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(nanotubes; catalyzed growth of carbon nanotubes in the cathode deposit of arc-discharge evapn. from graphite rods contg. Y2O3, La2O3 or Sc2O3)

IT 7782-42-5, Graphite, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(rods, precursor; catalyzed growth of carbon nanotubes in the cathode deposit of arc-discharge evapn. from graphite rods contg. Y2O3, La2O3 or Sc2O3)

| L Number | Hits | Search Text | DB | Time stamp |
|----------|------|--|---|------------------|
| 1 | 889 | 423/448.ccls. | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 16:24 |
| 2 | 4 | 423/448.ccls. and (scandium yttrium lanthanide actinide) | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 16:27 |
| 3 | 152 | 423/448.ccls. and catalyst | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 16:52 |
| 4 | 86 | (graphitized or graphitizing) near3 catalyst | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 17:30 |
| 5 | 23 | graphitizing near3 catalyst | USPAT; US-PGPUB; EPO; JPO; DERWENT | 2003/10/06 17:31 |